

Introduction to Manufacturing Technology
Technology Education–Applied Technology Education
Utah State Office of Education
CIP Code 210110

Text Book: ?

COURSE DESCRIPTION: A hands-on course that introduces students to manufacturing technology by changing raw materials into finish products by using current manufacturing technologies including automated systems.

STANDARD & OBJECTIVES

210110.01 STUDENTS WILL INVESTIGATE CAREER OPPORTUNITIES IN THE MANUFACTURING INDUSTRY, WILL EXPLORE THE IMPACT OF MANUFACTURING TECHNOLOGY ON OUR SOCIETY, AND WILL BE ABLE TO IDENTIFY A VARIETY OF MANUFACTURING TECHNOLOGIES, AND WILL LEARN AND USE SAFETY PRACTICES.

210110.0101 The students will identify occupations related to the manufacturing industry.

210110.0102 Student will state the differences between past and present methods of manufacturing.

210110.0103 Students will identify a variety of systems, methods, and materials used for building manufacturing technology.

210110.0104 Students will learn and use safe work habits and techniques.

210110.02 CHANGING RAW MATERIALS INTO FINISHED PRODUCTS.

210110.0201 The students will understand various material properties and their uses.

210110.0202 The student will demonstrate Assembling processes

210110.0203 The student will demonstrate finishing processes

210110.0204 The student will demonstrate Forming processes

210110.0205 The student will apply all the necessary steps in a production sequence

210110.03 OBTAIN BASIC SKILLS IN USE OF MANUFACTURING EQUIPMENT AND TOOLS.

210110.0301 The student will learn and use Safety rules and practices.

210110.0302 The student will demonstrate proper techniques for use in operation of basic equipment

210110.0303 Students will demonstrate the use of automated systems

210110.04 UNDERSTAND THE MANUFACTURING DESIGN PROCESS

- 210110.0401 Students will know the steps of the design process.
- 210110.0402 Students will understand how to identify and classify a problem.
- 210110.0403 Students will know the steps of researching a design problem.
- 210110.0404 Students will solve a design-based problem.

210110.05 INTRODUCE FREE ENTERPRISE AS IT RELATES TO
MANUFACTURING.

- 210110.0501 Students will explore entrepreneurship concepts.
- 210110.0502 Students will participate in the mass production process.
- 210110.0503 Students will understand the process of obtaining capital and managing finances.
- 210110.0504 Students will learn Marketing techniques.

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